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East 6/17/04

L Number	Hits	Search Text	DB	Time stamp
1	0	Inagaki.in. and Gotoh.in. and Kobori.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:41
3	23	brake with diode with (solenoid or electromagnetic) adj2 valve	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:27
4	1	5892650.URPN.	USPAT	2004/06/17 08:25
5	5	("4950974"   "5040514"   "5347421"   "5552954"   "5793127").PN.	USPAT	2004/06/17 08:25
6	0	brake with diode with (solenoid or electromagnetic) adj2 valve with antilock\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:27
7	1	brake with diode with (solenoid or electromagnetic) adj2 valve with (abs or anti adj lock\$4 or antilock\$4 or slip adj control or antiskid\$5 or anti adj skid\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:35
8	10	brake with diode with (solenoid or electromagnetic) adj2 valve and 303/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:42
9	23	brake with diode with (solenoid or electromagnetic) adj2 valve	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:36
10	20572	Inagaki.in. or Gotoh.in. or Kobori.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:37
11	35	( Inagaki.in. or Gotoh.in. or Kobori.in.) and brak\$4 same (solenoid or electromagnetic) adj valve	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:40
12	0	( Inagaki.in. or Gotoh.in. or Kobori.in.) and brak\$4 same (solenoid or electromagnetic) adj valve same diode	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:40
13	244	Inagaki.in. and hiromi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:41
14	88	Inagaki.in. and hiromi.in. and brak\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:41
15	16	brake with diode and honda.asn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/17 08:44

16	149	("6163093" "5967627" "6102493" "5004300" "5388608" "5971501" "5403075" "5458150" "5915799" "4973108" "5286098" "4561701" "5302007" "5403078" "5529389" "4779935" "4825989" "4867509" "4952003" "5303988" "5307275" "6145540" "6241326" "6394561" "6238016" "5242216" "5711582" "5725288" "5358316" "4568093" "5234265" "6345869" "6086165" "4915459" "5499865" "5967625" "5735583" "6209971" "6209971" "6422660" "4944565" "5597214" "5709438" "4778224" "5005132" "5255962" "6186603" "5288141" "5407260" "5472267").pn. ("5551767" "5556174" "5713641" "5765930" "6188947" "6247764" "6371573" "6709072" "5538334" "5938296" "4556261" "5518306" "4475773" "4556260" "4565411" "4865399" "5282675" "5480221" "5488396" "61998578" "4258958" "4301689"	USPAT; US-PGPUB	2004/06/17 08:45
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17	4	("6163093" "5967627" "6102493" "5004300" "5388608" "5971501" "5403075" "5458150" "5915799" "4973108" "5286098" "4561701" "5302007" "5403078" "5529389" "4779935" "4825989" "4867509" "4952003" "5303988" "5307275" "6145540" "6241326" "6394561" "6238016" "5242216" "5711582" "5725288" "5358316" "4568093" "5234265" "6345869" "6086165" "4915459" "5499865" "5967625" "5735583" "6209971" "6209971" "6422660" "4944565" "5597214" "5709438" "4778224" "5005132" "5255962" "6186603" "5288141" "5407260" "5472267").pn. ("5551767" "5556174" "5713641" "5765930" "6188947" "6247764" "6371573" "6709072" "5538334" "5938296" "4556261" "5518306" "4475773" "4556260" "4565411" "4865399" "5282675" "5480221" "5788207" "6199857" "4258958" "4301689"	USPAT; US-PGPUB	2004/06/17 08:45
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PLUS 6/17/04

**Butler, Douglas**

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**From:** PLUS  
**Sent:** Monday, June 14, 2004 11:02 AM  
**To:** Butler, Douglas  
**Subject:** PLUS Results for 10715128

Here are the PLUS search results for 10715128.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to [PLUS@uspto.gov](mailto:PLUS@uspto.gov).



10715128\_QUAL.txt



10715128\_LIST.txt



10715128\_WEST.txt



10715128\_EAST.txt



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10715128\_CLS.txt



10715128\_CLSTITLES.txt



10715128\_WDS.txt

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PLUS Search Results for S/N 10715128, Searched June 14, 2004

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10715128\_CLS

• Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10715128 on June 14, 2004

Original Classifications

14 303/119.2  
6 303/116.1  
6 303/119.3  
5 303/113.3  
5 303/113.4  
4 137/596.17  
4 303/113.2  
4 303/115.4  
4 303/116.2  
4 303/117.1  
4 303/118.1  
3 303/119.1  
3 303/3  
2 60/545  
2 303/10  
2 303/113.1  
2 303/113.5  
2 303/115.2  
2 303/116.4  
2 303/122.05  
2 303/122.06  
2 303/122.13  
2 303/149  
2 303/15  
2 303/156  
2 303/166  
2 701/75  
2 701/76

Cross-Reference Classifications

17 303/119.2  
16 303/116.1  
13 303/119.1  
9 180/197  
8 303/113.1  
8 303/115.4  
8 303/900  
8 303/DIG 4  
7 251/129.15  
7 303/10  
7 303/113.2  
6 137/596.17  
6 303/117.1  
5 188/352  
5 303/115.2  
5 303/DIG 10  
4 303/118.1  
4 303/119.3  
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3 137/625.65  
3 188/181A

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3 188/345  
 3 251/129.21  
 3 303/113.3  
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 2 474/28  
 2 701/74  
 2 701/78

Combined Classifications

31 303/119.2  
 22 303/116.1  
 16 303/119.1  
 12 303/115.4  
 11 303/113.2  
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 10 303/113.1  
 10 303/117.1  
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8 303/113.3  
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2 303/152  
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2 303/DIG 8  
2 439/34  
2 474/28  
2 701/71  
2 701/75  
2 701/79

## 10715128\_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10715128 on June 14, 2004

- 31 303/119.2 (14 OR, 17 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/119.1 ..System controlled by solenoid valve  
 303/119.2 ...System solenoid valve detail
- 22 303/116.1 (6 OR, 16 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/116.1 ..Including pump with system solenoid valve
- 16 303/119.1 (3 OR, 13 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/119.1 ..System controlled by solenoid valve
- 12 303/115.4 (4 OR, 8 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/115.1 ..System controlled by expansible chamber type  
 modulator  
 303/115.4 ...Having pump pressure control
- 11 303/113.2 (4 OR, 7 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/113.2 ..With traction control
- 10 137/596.17 (4 OR, 6 XR)  
 Class 137 : FLUID HANDLING  
 137/561R SYSTEMS  
 137/596 .Supply and exhaust  
 137/596.17 ..Motor
- 10 303/113.1 (2 OR, 8 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal
- 10 303/117.1 (4 OR, 6 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal

## 10715128\_CLSTITLES

- 303/117.1 ..Spool valve
- 10 303/119.3 (6 OR, 4 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/119.1 ..System controlled by solenoid valve
  - 303/119.3 ...Housing for plural solenoids
- 9 180/197 (0 OR, 9 XR)
  - Class 180 : MOTOR VEHICLES
  - 180/197 WITH MEANS FOR DETECTING WHEEL SLIP DURING VEHICLE ACCELERATION AND CONTROLLING IT BY REDUCING APPLICATION OF POWER TO WHEEL
- 9 303/10 (2 OR, 7 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/10 WITH PUMP
- 8 251/129.15 (1 OR, 7 XR)
  - Class 251 : VALVES AND VALVE ACTUATION
  - 251/129.01 ELECTRICALLY ACTUATED VALVE
  - 251/129.15 .Including solenoid
- 8 303/113.3 (5 OR, 3 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/113.2 ..With traction control
  - 303/113.3 ...Including booster
- 8 303/113.4 (5 OR, 3 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/113.4 ..Including a stroke sensor
- 8 303/118.1 (4 OR, 4 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/118.1 ..Pneumatic (relay or motorman) type
- 8 303/900 (0 OR, 8 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/900 ABS THROTTLE CONTROL
- 8 303/DIG 4 (0 OR, 8 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/DIG 2 BRAKE CONTROL BY PRESSURE COMPARISON
  - 303/DIG 3 .Electrical pressure sensor
  - 303/DIG 4 ..Pressure signal used in electrical speed controlled braking circuit
- 7 303/115.2 (2 OR, 5 XR)



## 10715128\_CLSTITLES

- Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel lock signal  
 303/115.1 ..System controlled by expansible chamber type modulator  
 303/115.2 ...Having electric control
- 7 303/116.2 (4 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel lock signal  
 303/116.1 ..Including pump with system solenoid valve  
 303/116.2 ...Having pressure line isolated from master cylinder line
- 6 303/156 (2 OR, 4 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/156 .Pulse frequency or time period controlling pressure rebuild
- 5 188/352 (0 OR, 5 XR)  
 Class 188 : BRAKES  
 188/381 FRICTIONAL VIBRATION DAMPER  
 188/151R .Fluid pressure  
 188/152 ..Road vehicle  
 188/352 ...With bleeding or filling device
- 5 303/113.5 (2 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel lock signal  
 303/113.5 ..With system apportioning control
- 5 303/116.4 (2 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel lock signal  
 303/116.4 ..System pump structure detail
- 5 303/15 (2 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/13 MULTIPLE CONTROL  
 303/15 .Fluid and electric
- 5 303/DIG 10 (0 OR, 5 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/DIG 10 VALVE BLOCK INTEGRATING PUMP, VALVES, SOLENOID, ACCUMULATOR, ETC.
- 4 137/625.65 (1 OR, 3 XR)  
 Class 137 : FLUID HANDLING  
 137/561R SYSTEMS  
 137/625 .Multi-way valve unit  
 137/625.2 ..Supply and exhaust

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- 137/625.65 ...Motor-operated
- 4 303/114.1 (1 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/113.1 .Having a valve system responsive to a wheel  
 lock signal  
 303/114.1 ..Including hydraulic power booster
- 4 303/127 (0 OR, 4 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/127 .Pneumatic
- 4 303/166 (2 OR, 2 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/121 SPEED-CONTROLLED  
 303/166 .Wheel speed sensor and braking pressure sensor
- 4 303/20 (0 OR, 4 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/20 ELECTRIC CONTROL
- 4 303/61 (0 OR, 4 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/50 MOTORMAN'S VALVES  
 303/61 .Intermittent
- 3 60/545 (2 OR, 1 XR)  
 Class 060 : POWER PLANTS  
 60/325 PRESSURE FLUID SOURCE AND MOTOR  
 60/533 .Pulsator  
 60/545 ..Having electricity or magnetically operated  
 structure
- 3 137/627.5 (1 OR, 2 XR)  
 Class 137 : FLUID HANDLING  
 137/561R SYSTEMS  
 137/627.5 .Sequentially closing and opening alternately  
 seating flow controllers
- 3 188/181A (0 OR, 3 XR)  
 Class 188 : BRAKES  
 188/381 FRICTIONAL VIBRATION DAMPER  
 188/174 .Weight  
 188/180 ..Regulators  
 188/181R ...Vehicle  
 188/181A ....Acceleration responsive
- 3 188/345 (0 OR, 3 XR)  
 Class 188 : BRAKES  
 188/381 FRICTIONAL VIBRATION DAMPER  
 188/151R .Fluid pressure  
 188/152 ..Road vehicle  
 188/345 ...With multiple master cylinders
- 3 251/129.21 (0 OR, 3 XR)  
 Class 251 : VALVES AND VALVE ACTUATION

10715128\_CLSTITLES

- 251/129.01 ELECTRICALLY ACTUATED VALVE
- 251/129.15 .Including solenoid
- 251/129.21 ..Coil surrounds valve port or flow line
  
- 3 303/11 (1 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/10 WITH PUMP
  - 303/11 .Pressure control
  
- 3 303/114.3 (1 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/114.3 ..Including pneumatic power booster
  
- 3 303/122.04 (1 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/122 .With failure responsive means
  - 303/122.04 ..Electric system failure (no warning)
  
- 3 303/122.05 (2 OR, 1 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/122 .With failure responsive means
  - 303/122.04 ...Electric system failure (no warning)
  - 303/122.05 ...Electronic or electric component (e.g., speed detector, failure sensing) with warning
  
- 3 303/122.06 (2 OR, 1 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/122 .With failure responsive means
  - 303/122.06 ..ABS failure detected via time period of sensed wheel lock or wheel speed signal
  
- 3 303/155 (0 OR, 3 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/155 .Braking pressure demand or braking force desire
  
- 3 303/159 (0 OR, 3 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/159 .Wheel pressure delay compared to reference
  
- 3 303/162 (1 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/162 .Current control of linear piston drive motor
  
- 3 303/174 (1 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/174 .Previously stored wheel speed information

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3 303/3 (3 OR, 0 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/2 MULTIPLE SYSTEMS  
 303/3 .Fluid pressure and electric

3 303/68 (0 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/50 MOTORMAN'S VALVES  
 303/68 .Motor

3 303/901 (0 OR, 3 XR)  
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
 303/901 ABS CHECK VALVE DETAIL

3 701/74 (1 OR, 2 XR)  
 Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
 RELATIVE LOCATION  
 701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
 INDICATION  
 701/70 .Indication or control of braking,  
 acceleration, or deceleration  
 701/71 ..Antiskid, antilock, or brake slip control  
 701/74 ...Having particular means to determine a  
 reference value for wheel slippage or pseudo-vehicle speed

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3 701/76 (2 OR, 1 XR)  
 Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
 RELATIVE LOCATION  
 701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
 INDICATION  
 701/70 .Indication or control of braking,  
 acceleration, or deceleration  
 701/71 ..Antiskid, antilock, or brake slip control  
 701/76 ...Fail-safe system

3 701/78 (1 OR, 2 XR)  
 Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
 RELATIVE LOCATION  
 701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
 INDICATION  
 701/70 .Indication or control of braking,  
 acceleration, or deceleration  
 701/71 ..Antiskid, antilock, or brake slip control  
 701/78 ...Control of brake pressure

2 60/581 (0 OR, 2 XR)  
 Class 060 : POWER PLANTS  
 60/325 PRESSURE FLUID SOURCE AND MOTOR  
 60/533 .Pulsator  
 60/581 ..Plural structurally related master pistons,  
 cylinders or pulsator circuits

2 60/591 (0 OR, 2 XR)  
 Class 060 : POWER PLANTS  
 60/325 PRESSURE FLUID SOURCE AND MOTOR  
 60/533 .Pulsator  
 60/591 ..Having valve, director, or restrictor in

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pulse fluid flow path

- 2 91/433 (0 OR, 2 XR)
  - Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
  - 91/418 WITH MOTIVE FLUID VALVE
  - 91/433 .Both inlet and exhaust controlled by motive fluid pressure in supply line or chamber
- 2 137/884 (0 OR, 2 XR)
  - Class 137 : FLUID HANDLING
  - 137/561R SYSTEMS
  - 137/861 .With flow control means for branched passages
  - 137/884 ..Sectional block structure
- 2 188/16 (0 OR, 2 XR)
  - Class 188 : BRAKES
  - 188/2R VEHICLE
  - 188/16 .Independent wheel
- 2 188/353 (0 OR, 2 XR)
  - Class 188 : BRAKES
  - 188/381 FRICTIONAL VIBRATION DAMPER
  - 188/151R .Fluid pressure
  - 188/152 ..Road vehicle
  - 188/353 ...With hydraulic lock
- 2 188/354 (0 OR, 2 XR)
  - Class 188 : BRAKES
  - 188/381 FRICTIONAL VIBRATION DAMPER
  - 188/151R .Fluid pressure
  - 188/152 ..Road vehicle
  - 188/354 ...With independent wheel control
- 2 188/358 (0 OR, 2 XR)
  - Class 188 : BRAKES
  - 188/381 FRICTIONAL VIBRATION DAMPER
  - 188/151R .Fluid pressure
  - 188/152 ..Road vehicle
  - 188/355 ...With nonmanual fluid-power source
  - 188/358 ....Liquid power
- 2 251/11 (0 OR, 2 XR)
  - Class 251 : VALVES AND VALVE ACTUATION
  - 251/11 HEAT OR BUOYANCY MOTOR ACTUATED
- 2 251/129.14 (0 OR, 2 XR)
  - Class 251 : VALVES AND VALVE ACTUATION
  - 251/129.01 ELECTRICALLY ACTUATED VALVE
  - 251/129.14 .Freely rotatable ball valve
- 2 303/115.3 (0 OR, 2 XR)
  - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
  - 303/121 SPEED-CONTROLLED
  - 303/113.1 .Having a valve system responsive to a wheel lock signal
  - 303/115.1 ..System controlled by expansible chamber type modulator
  - 303/115.3 ...Having vacuum motor control

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- 2 303/122.01 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.01 ..Traction failure
- 2 303/122.07 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.07 ..Time signal error (no warning)
- 2 303/122.1 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.09 ..Pressure failure  
303/122.1 ...With warning
- 2 303/122.11 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.09 ..Pressure failure  
303/122.11 ...Detected via stroke sensor
- 2 303/122.13 (2 OR, 0 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.09 ..Pressure failure  
303/122.13 ...Auxiliary pressure failure
- 2 303/122.15 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/122 .With failure responsive means  
303/122.09 ..Pressure failure  
303/122.15 ...Pneumatic
- 2 303/14 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/13 MULTIPLE CONTROL  
303/14 .Double heading
- 2 303/140 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/139 .And traction control  
303/140 ..With yaw control
- 2 303/149 (2 OR, 0 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/149 .Split coefficient of friction (mu)
- 2 303/152 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS

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303/121 SPEED-CONTROLLED  
303/152 .Regenerative brakes

2 303/157 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/157 .Pressure release control

2 303/158 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/158 .Pressure reapply control

2 303/175 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/175 .Incipient or imminent skid measured

2 303/177 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/177 .Sensing jerk, acceleration, or deceleration

2 303/188 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/188 .All wheel apportioning arrangement (e.g.,  
cross coupling)

2 303/191 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/191 .Odd condition or device detection (e.g., fluid  
or brake temperature, hill holder, anti-squeal controller  
acoustic emission)

2 303/195 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/121 SPEED-CONTROLLED  
303/191 .Odd condition or device detection (e.g., fluid  
or brake temperature, hill holder, anti-squeal controller  
acoustic emission)  
303/195 ..Spurious signal

2 303/52 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/50 MOTORMAN'S VALVES  
303/52 .Multiple motors

2 303/7 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/5 MULTIPLE FLUID-RECEIVING DEVICES  
303/6.01 .Multiple motors  
303/7 ..Sectional train

2 303/84.2 (1 OR, 1 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS

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303/84.1 FLOW RETARDER  
303/84.2 .Isolation valve

2 303/DIG 2 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/DIG 2 BRAKE CONTROL BY PRESSURE COMPARISON

2 303/DIG 3 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/DIG 2 BRAKE CONTROL BY PRESSURE COMPARISON  
303/DIG 3 .Electrical pressure sensor

2 303/DIG 8 (0 OR, 2 XR)  
Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS  
303/DIG 8 ANTICHATTER

2 439/34 (0 OR, 2 XR)  
Class 439 : ELECTRICAL CONNECTORS  
439/34 WITH VEHICLE STRUCTURE

2 474/28 (0 OR, 2 XR)  
Class 474 : ENDLESS BELT POWER TRANSMISSION SYSTEMS OR  
COMPONENTS  
474/8 PULLEY WITH BELT-RECEIVING GROOVE FORMED BY  
DRIVE FACES ON RELATIVELY AXIALLY MOVABLE COAXIAL  
CONFRONTING MEMBERS (E.G., EXPANSIBLE CONE PULLEY, ETC.)  
474/28 .Fluid pressure actuator for adjustment of  
member

2 701/71 (1 OR, 1 XR)  
Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
RELATIVE LOCATION  
701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
INDICATION  
701/70 .Indication or control of braking,  
acceleration, or deceleration  
701/71 ..Antiskid, antilock, or brake slip control

2 701/75 (2 OR, 0 XR)  
Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
RELATIVE LOCATION  
701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
INDICATION  
701/70 .Indication or control of braking,  
acceleration, or deceleration  
701/71 ..Antiskid, antilock, or brake slip control  
701/74 ...Having particular means to determine a  
reference value for wheel slippage or pseudo-vehicle spe

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701/75 ....Correction or modification

2 701/79 (1 OR, 1 XR)  
Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND  
RELATIVE LOCATION  
701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR  
INDICATION  
701/70 .Indication or control of braking,



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acceleration, or deceleration

701/71 ..Antiskid, antilock, or brake slip control  
701/78 ...Control of brake pressure  
701/79 ....Having speed variation responsive means  
(e.g., acceleration, deceleration)